

HIGHLY INTEGRATED MPEG-4 VIDEO DECODING UNIT

Abstract

A highly integrated MPEG-4 video decoding unit includes switching circuit, a set of decoding modules, and a memory. The set of decoding modules includes a plurality of decoding modules, each capable of decoding a predetermined signal in each of a plurality of VOP types. The decoding module may include a VOP type indicating flag that is set by the switching circuit so that the correct lookup table can be used during decoding of the predetermined signal. Alternatively, the necessary lookup table(s) may be electronically transferred to the corresponding decoding module. According to the type of VOP being decoded, the switching circuit may send a predetermined sequence of selection signals to a multiplexer so that the decoded results from appropriate decoding modules are stored into the corresponding storage elements in the memory.